

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human Vinculin in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 728526
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Vinculin Lys1020-Gln1134 Accession # P18206
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

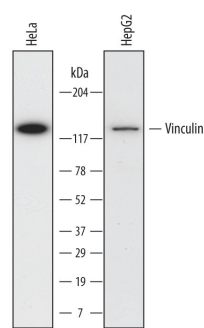
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below
<b>Simple Western</b>	20 µg/mL	See Below

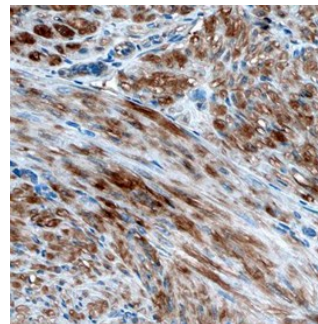
## DATA

### Western Blot



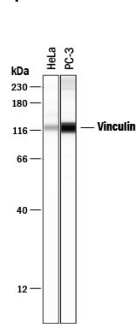
**Detection of Human Vinculin by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Vinculin Monoclonal Antibody (Catalog # MAB6896) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Vinculin at approximately 124 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunohistochemistry



**Vinculin in Human Uterus.** Vinculin was detected in immersion fixed paraffin-embedded sections of human uterus using Mouse Anti-Human Vinculin Monoclonal Antibody (Catalog # MAB6896) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to smooth muscle cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Simple Western



**Detection of Human Vinculin by Simple Western™.** Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line and PC-3 human prostate cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for Vinculin at approximately 122 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human/Mouse/Rat Vinculin Monoclonal Antibody (Catalog # MAB6896). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

VCL (vinculin) is a 117 kDa actin binding cytoskeletal phosphoprotein found in adherens-type cell-cell and cell-matrix junctions. The 1066 amino acid (aa) human vinculin contains an N-terminal globular head (aa 2-835) with a talin interaction domain (aa 168-208) and three tandem repeats (aa 259-589), a pro-rich linker region (aa 826-878), and a C-terminal tail that facilitates phospholipid membrane insertion (aa 1003-1134). An 1134 aa form termed metavinculin contains 68 aa inserted after aa 915 and mainly occurs in cardiac, skeletal and smooth muscle. Human, mouse and rat vinculin share 100% aa sequence identity within the region used as an immunogen.